Supplementary Materials

Table S1: New GDMT score

Drug class	Doses	Point
RASi	Titrated ARNi	3
	≥50% of ACEi/ARB maximum dose	2
	Un-titrated ARNi	1
	1-49% of ACEi/ARB maximum dose	1
	None	0
BB	≥50% of BB maximum dose	2
	1-49% of BB maximum dose	1
	None	0
MRA	Any doses of MRA	1
	None	0
SGLT2i	Any doses of SGLT2i	1
	None	0

Basic concept:

- Guidelines direct ACEi/ARB or ARNi, BB, MRA, and SGLT2i as 4 pillars of foundational medical therapy for heart failure.[12,13].
- Clinical data indicate the importance of prioritizing the initiation and titration of GDMT during hospitalization or early at outpatient follow-up.[9,11,28]
- A simple scoring scale that can be used by community practitioners as well as cardiologists would be practically useful.

ACEi/ARB:

- Randomized clinical trials comparing high-dose vs. low-dose demonstrated superiority of high-dose regimens.[17,33]
- Clinical data indicate that titration of ACEi/ARB improves clinical outcomes.[15,34]
- Scores for ACEi/ARB should be in a dose-dependent ordinal manner (score 0-2) to encourage titration.

ARNi:

- Clinical trials have consistently demonstrated the superiority of ARNi compared to ACEi.[5,35]
- To date, there are no randomized trials comparing the efficacy of high-dose vs. low-dose on cardiovascular outcomes.
- Clinical data indicate that the efficacy of ARNi is consistent across dose levels, as long as the dose was up-titrated according to patient tolerability.[36]
- Scores for titrated ARNi should exceed ACEi and be in an ordinal manner (score 0-3) to encourage titration as long as patient tolerability permits.

BB:

- Randomized clinical trials comparing high-dose vs. low-dose demonstrated superiority of high-dose regimens.[14]
- Clinical data indicate that titration of BB improves clinical outcomes.[15,16]
- Scores for BB should be in a dose-dependent ordinal manner (score 0-2) to encourage titration.

MRA and SGLT2i:

- To date, there are no randomized trials comparing the efficacy of high-dose vs. low-dose on cardiovascular outcomes. There is little data showing the benefit of increasing the dose.
- With respect to MRA and SGLT2i, the presence or absence is more important than the dose (score 0 or 1).

HCN inhibitor (ivabradine), sGC stimulator (vericiguat), and selective cardiac myosin activator (omecamtiv):

- These agents were not included in the scoring scale for the following reasons:

i) Indications are limited depending on the patient conditions.

ii) These agents are second-line therapy with marginal clinical efficacy.

Hydralazine and nitrates:

- Hydralazine and nitrates were excluded from the scoring scale because of their low efficacy in preventing cardiovascular events and their uncertain racial generalizability.[37,38]

Table S2: Maximum daily doses of each drug in Japan

Drug	Maximum daily dose
ACEi	
Enarapril	10 mg o.d.
Lisinopril	20 mg o.d.
Perindopril	8 mg o.d.
ARB	
Candesartan	12 mg o.d.
Azilsartan	40 mg o.d.
Losartan	100 mg o.d.
Valsartan	160 mg o.d.
Olmesartan	40 mg o.d.
Telmisartan	80 mg o.d.
ARNI	
Sacubitril/valsartan	97/103 mg b.i.d.
Beta blocker	
bisoprolol	5mg o.d.
carvedilol	10mg b.i.d.

Abbreviations: ACEi = angiotensin-converting enzyme inhibitor; ARB = angiotensin II receptor blocker; ARNI = angiotensin receptor neprilysin inhibitor; b.i.d. = bis in die (twice daily); o.d. = omne in die (once a day).